



JENNIFER M. GRANHOLM  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
DETROIT



STEVEN E. CHESTER  
DIRECTOR

January 10, 2006

Mr. Chuck Geadelmann  
Honeywell International Inc.  
1985 Douglas Drive North  
MS 2499  
Golden Valley, MN 55422

Dear Mr. Geadelmann:

SUBJECT: Remedial Investigation/Feasibility Study Work Plan for the  
Honeywell/former Detroit Coke Corporation Property, Detroit, Michigan

The Michigan Department of Environmental Quality (MDEQ), has reviewed the revised Remedial Investigation/Feasibility Study Work Plan (Work Plan) dated December, 2005, for the former Detroit Coke Corporation Site located in Detroit, Michigan. The Work Plan was received by the District Office via e-mail on December 14, 2005. The RI/FS Work Plan was submitted pursuant to Paragraph 7.7 of the Administrative Order by Consent for Response Activities (Reference No. AOC-ERD-99-05) (AOC), which dictates the RI/FS must be performed for the portion of the Facility not addressed in the Interim Response Activity Work Plan (IRP); Attachment C of the AOC. The IRP has been modified since the AOC was originally drafted; however, the RI/FS and Remedial Action Plan (RAP) requirements remain.

The MDEQ approves of the RI/FS Work Plan and associated schedule. Please provide the MDEQ with four copies of the Plan for our files and distribution. If you have any questions regarding this matter, please contact me.

Sincerely,

Steven J. Hoin, Project Manager, Geologist  
Remediation and Redevelopment Division  
Detroit Field Office  
313-456-4668

Mr. Chuck Geadelmann

2

January 10, 2006

cc: Ms. Dana Reznik, U.S. EPA

Mr. Gregory Rudloff, U. S. EPA

Mr. Garret Bondy, Mactec Engineering and Consulting, Inc.

Mr. Alan Wasserman, Counsel, City of Detroit

Mr. Raymond Scott, City of Detroit

Ms. Sharon Newlon, Counsel, Minergy

Mr. Oladipo Oyinsan, MDEQ

Mr. Steven Kitler, MDEQ

Ms. Caroline Olmsted, MDEQ

Mr. Pete Quackenbush, MDEQ



JENNIFER M. GRANHOLM  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
DETROIT



STEVEN E. CHESTER  
DIRECTOR

November 30, 2005

Mr. Chuck Geadelmann  
Honeywell International, Incorporated  
1985 Douglas Drive North  
MS 2499  
Golden Valley, Minnesota 55422

Dear Mr. Geadelmann:

SUBJECT: Remedial Investigation/Feasibility Study Work Plan for the  
Honeywell/Former Detroit Coke Corporation Property  
Detroit, Wayne County, Michigan

The Michigan Department of Environmental Quality (MDEQ) has reviewed the revised Remedial Investigation/Feasibility Study Work Plan (RI/FS) dated October 2005, for the above-referenced site. The RI/FS was received by the Detroit District Office on October 19, 2005. The RI/FS was submitted pursuant to Paragraph 7.7 of the Administrative Order by Consent for Response Activities (Reference No. AOC-ERD-99-05) (AOC), which dictates the RI/FS must be performed for the portion of the facility not addressed in the Interim Response Activity Work Plan (IRP); Attachment C of the AOC. The IRP has been modified since the AOC was originally drafted; however, the RI/FS and Remedial Action Plan (RAP) requirements remain.

MDEQ approval of the RI/FS can be granted once the following comments are addressed:

Section 1.2 - R 299.5536(2) of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, and the Part 201 Administrative Rules allows for the facility characterization to be reflective of planned land use and resource restrictions. The MDEQ acknowledges that the RI/FS utilizes this approach; however, it will be necessary to complete remedial activities to address some of the pathways of concern, such as the groundwater surface water interface criteria (GSI) pathway, where cleanup criteria are not affected by property use. Section 1.2 needs to accurately reflect this.

Section 2.3 - The RI/FS suggests that groundwater migration will be limited in the lower sand unit. An objective of this work effort is to evaluate this. The RI/FS should refrain from this conclusion until the data are collected and presented.

Section 2.4.1 - The breadth of Honeywell International Incorporated's (Honeywell) obligations regarding the "flowing tar" at the site have not been determined. This needs to be addressed in the RAP.

Section 2.5.1, Page 2-8 - The RI/FS needs to acutely reflect the status of the mixing zone determinations. These determinations are considered preliminary until a RAP has been completed and approved. Once the RI/FS is complete and the RAP is submitted, Honeywell should request a final mixing zone determination.

Section 2.5.1 Page 2-8 - The RI/FS suggests that natural attenuation is occurring for several volatile organic compounds at the site and that a recent Focused Feasibly Study concluded that neither naphthalene nor benzene were expected to pose a risk to the river. Although this conclusion could be accurate, this determination needs to be made once the RI/FS is complete. Please revise the text to reflect this.

Section 2.6.2 - The RI/FS needs to indicate that the final determination of source control measures will be determined as part of the RAP evaluation.

Section 3.1.2 - The RI/FS should include a discussion of the underground storage tank release at the YTI property and a description of any accommodations made because of that release.

The MDEQ considers the extent of the thicker sand along Jefferson Avenue to be a critical part of the RI/FS. More emphasis should be placed on determining the lateral extent of this sand in this work effort.

Section 4.1 - The RI/FS indicates that a Risk Assessment will be performed for both human and ecological receptors as part of this work effort. The MDEQ does not consider the planned data to be sufficient to perform a site-specific risk assessment nor ecological risk review. Please remove this task from the RI/FS.

The maps do not appear to include well MW-503. Please correct this.

Section - 4.1.2 - Borings are to be drilled to a "basal clay" unit. This clay is often not easily distinguished from upper "organic" clays. The penetration depth should be sufficient to ensure that the borings are not terminated until they reach the upper glacial clay unit. Care should be taken to characterize this clay unit.

Two wells should be installed at locations where the saturated thickness is greater than 10-feet rather than the 20-feet proposed.

Section 4.1.3 - The sampling protocol suggests that soil beneath or into the capillary fringe will not be sampled. The capillary fringe should be field screened and examined and samples should be collected from that zone in the event that significant contamination is found.

Section 4.1.3 - The analytical scan needs to encompass the hazardous substances encountered at the DCC property rather than compounds of concern for the GSI pathway. The analytical reports should include the full scans appropriate for those compounds. These scans can be limited during the monitoring phase once the RI/FS is complete.

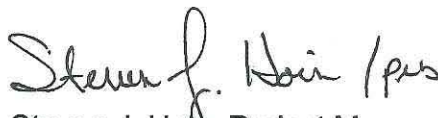
Section 4.1.5 - Stilling wells should be installed as permanent wells capable of withstanding site conditions since these will likely be part of any on-going monitoring programs for the site. Please provide additional details regarding the difference between a permanent and temporary stilling well.

Section 4.1.8 - The MDEQ cannot approve of an approach for using site-specific data for determining groundwater background concentrations at this time. This a complex issue. Honeywell can propose to use an approach based upon a statistical protocol approved by the MDEQ once the RI/FS data have been collected and the monitoring program has been carried out for a minimum of one year.

The RI/FS must be modified to address the concerns and comments outlined in this letter before approval can be granted. The MDEQ requests that Honeywell submit a revised RI/FS within 30 days of receipt of this letter. The MDEQ will expedite its review.

If you have any questions regarding this matter, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven J. Horn / pms".

Steven J. Horn, Project Manager, Geologist  
Detroit District Office  
Remediation and Redevelopment Division  
313-456-4668

cc: Ms. Dana Reznik, United States Environmental Protection Agency  
Mr. Gregory Rudloff, United States Environmental Protection Agency  
Mr. Garret Bondy, MACTEC Engineering and Consulting, Incorporated  
Mr. Alan Wasserman, Counsel, City of Detroit  
Mr. Raymond Scott, City of Detroit  
Ms. Sharon Newlon, Counsel, Minergy  
Mr. Oladipo Oyinsan, MDEQ  
Ms. Caroline Olmsted, MDEQ  
Mr. Pete Quackenbush, MDEQ





June 8, 2005

Mr. Gregory A. Rudloff  
Corrective Action Project Manager  
Corrective Action Section  
Waste Management Branch  
Waste, Pesticides and Toxics Division  
Region 5  
United States Environmental Protection Agency  
77 W. Jackson Blvd., DW-8J  
Chicago, IL 60604-3590

Subject: Former Detroit Coke Corporation Site  
Environmental Indicator Status

Dear Mr. Rudloff:

During our project-status meeting on April 28, 2005, MACTEC Engineering and Consulting, Inc. (MACTEC) agreed to prepare this letter on behalf of Honeywell International Inc. (Honeywell) to summarize the progress of the Former Detroit Coke Corporation (FDCC) site (MID099114704) toward meeting the "Migration of Contaminated Groundwater Under Control" Environmental Indicator (EI) milestone established by the United States Environmental Protection Agency (EPA) under the RCRA Corrective Action program. According to the RCRAinfo database, the EPA determined that the FDCC site met the EI for "Current Human Exposures Under Control" on September 25, 2003. To the best of our knowledge and belief, the conditions that led to that determination have not changed.

The FDCC site is located in an industrial area at the confluence of the Detroit River and the Rouge River that has been targeted for redevelopment as part of the City of Detroit's (City's) urban revitalization program. Since 1999, the City has been facilitating redevelopment at the Site by providing new infrastructure (including a new seawall, an access road, and utilities) to attract developers. Concurrently, Honeywell has been planning for and implementing interim response activities to address environmental contamination related to its historical industrial operations at the Site.

Previous environmental investigations at the FDCC site documented organic compounds (primarily benzene and naphthalene) and inorganic substances (primarily un-ionized ammonia) in groundwater and shallow fill/soil at concentrations exceeding Michigan Department of Environmental Quality (MDEQ) cleanup criteria for industrial property. Most potential exposures to contaminants (e.g., drinking water or direct contact) will be precluded through resource and land use restrictions. However, un-ionized ammonia is present in groundwater near the rivers at concentrations exceeding the Final Acute Value

for un-ionized ammonia in warm-water streams. The actual flux of un-ionized ammonia to the rivers is estimated to be extremely small (approximately 0.08 pounds per day), and the dilution factor in the rivers is between 300,000 (Rouge River) and 600 million to one (Detroit River). At this time, there are no indications of unacceptable impacts to surface water, sediment, or eco-systems as a result of groundwater discharging from the site.

Groundwater monitoring for compounds of concern at the site has been ongoing since 1998 and is expected to continue for many more years. Generally, contaminant concentrations in groundwater at the Site appear to be stable or declining, possibly because of the source-removal measures undertaken by Honeywell at the site. Previous evaluations have shown that significant contaminant degradation is occurring in groundwater at the Site. The current extent and magnitude of each contaminant plume probably represents its maximum extent and maximum future concentration in the shallow-fill aquifer.

To mitigate the venting of contaminated groundwater to the rivers, the site's original Interim Response Plan (IRP) proposed to install a bentonite-slurry subsurface barrier wall between the contaminant plume and the rivers. Subsequently, the installation of the new seawall and other industrial redevelopment activities along the Detroit River made the proposed slurry wall impractical to construct. A Final Revised IRP (submitted to the MDEQ in January 2005) substituted a groundwater extraction and treatment system to capture the contaminated groundwater migrating from the apparent source areas. This system is currently under construction. The collection trenches and most of the associated subsurface piping have been installed in advance of expected redevelopment on the affected parcels. Design of the treatment system is underway. The groundwater extraction and treatment system is expected to begin operation in March 2006.

Although most of the existing groundwater plume will be captured by the groundwater collection system, a portion of the plume downgradient from the groundwater collection system may be beyond the reach of the current system's capture zone. In addition, contaminated groundwater has migrated from the shallow fill aquifer into a lower sand layer near the Detroit River. The effect of the groundwater extraction system on these portions of the plume is difficult to predict.

Honeywell has proposed a groundwater monitoring program to evaluate the effectiveness of the groundwater extraction system and to provide the data needed to prepare a Remedial Action Plan for the site. If the data obtained from the expanded groundwater monitoring network indicate that the groundwater control system will not prevent unacceptable concentrations of contaminants from venting to the rivers, Honeywell will evaluate operational or design changes to the system and/or other response actions, as appropriate.

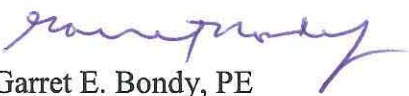
Mr. Gregory A. Rudloff  
June 8, 2005  
Page 3 of 3


Honeywell submitted the "Draft Remedial Investigation/Feasibility Study Work Plan for the Former Detroit Coke Corporation Site" to the MDEQ on March 18, 2005. To establish baseline conditions, the Work Plan calls for two rounds of groundwater monitoring to be conducted before the groundwater extraction system is started up in March 2006. Groundwater data collected during two post-startup events will be compared to the baseline conditions to assess the effectiveness of the groundwater extraction and treatment system in protecting surface water at the site. The draft Remedial Investigation (RI) report is scheduled for submittal to the MDEQ approximately six months after system startup (October 16, 2006). If data gaps are identified, a second phase of RI is expected to occur from December 2006 through August 2007, followed by a Feasibility Study and submittal of a draft Remedial Action Plan to the MDEQ in December 2007.

We trust this letter provides the information needed to determine the site's progress toward completion of the EI for control of contaminated groundwater. If you require additional information or clarification, please do not hesitate to contact us.

Sincerely,

**MACTEC Engineering and Consulting, Inc.**

  
Garret E. Bondy, PE  
Senior Principal Project Manager

  
Michael O'Hearn, PE  
Senior Principal Engineer

cc: Mr. Chuck Geadelmann (Honeywell International, Inc.)  
Mr. Steven D. Hoin (Michigan Department of Environmental Quality)  
Project File 3293041810





JENNIFER M. GRANHOLM  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
DETROIT



STEVEN E. CHESTER  
DIRECTOR

July 19, 2005

Mr. Chuck Geadelmann  
Honeywell International, Incorporated  
1985 Douglas Drive North  
MS 2499  
Golden Valley, Minnesota 55422

Dear Mr. Geadelmann:

SUBJECT: Remedial Investigation/Feasibility Study Work Plan  
Honeywell/Former Detroit Coke Corporation Property  
Detroit, Wayne County, Michigan

The Michigan Department of Environmental Quality (MDEQ) has reviewed the Remedial Investigation/Feasibility Study Work Plan (Work Plan) dated March 18, 2005, for the above-referenced site. The Work Plan was received by the Detroit District Office on March 21, 2005. The RI/FS Work Plan was submitted pursuant to Paragraph 7.7 of the Administrative Order by Consent for Response Activities (Reference No. AOC-ERD-99-05) (AOC), which indicates the RI/FS should be performed for the portion of the facility not addressed in the Interim Response Activity Work Plan (IRP), Attachment C of the AOC. The IRP has been modified since the AOC was originally drafted; however, the RI/FS and Remedial Action Plan (RAP) requirements remain.

The IRP is being revised to substitute groundwater trenches for a slurry wall to address contaminated groundwater on an interim basis. This revision prompts the need to specify the goals and objectives of the RI/FS Work Plan to ensure consistency with the original agreement. The goal of the RI/FS Work Plan shall be to further investigate the soils and groundwater on the Detroit Coke Property and Yellow Freight Property, as defined in the AOC (collectively, the Properties), to assess facility conditions in order to select an appropriate remedial action that adequately addresses the provisions prescribed in Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended, (NREPA) and the Part 201 Administrative Rules. The resulting RI/FS objectives are to include:

- Further characterization of groundwater flow patterns to understand the effects of site development and interim response activities,
- Complete characterization of all relevant pathways, but in particular the groundwater-surface water interface (GSI),
- Characterization of Detroit Coke related contaminants on the Yellow Transportation, Incorporated (YTI) property,

- Characterization of off-site contamination particularly to the north of the YTI property,
- Characterization of off-site releases, in particular to the north under Jefferson Avenue,
- Characterization of the vertical extent of contamination, especially in the deeper sands along the Detroit River,
- Further delineation of free product or product saturated soils,
- Assessment of contaminated sediments related to the site, if any, and
- Further characterization of select relevant pathways such as indoor air.

This review of the RI/FS Work Plan is contingent upon the modification of Attachment C of the AOC to include the approved revised IRP. The MDEQ recognizes that portions of the proposed work will be implemented in conjunction with the RI, such as monitoring well installation and groundwater monitoring.

### **RI/FS Work Plan**

MDEQ approval of the RI/FS Work Plan is dependent upon all of the following comments and resulting modifications.

A discussion of anticipated subsequent phases of investigation as required under R 299.5528 of Part 201 shall be included. This RI/FS Work Plan did include a discussion of subsequent activities and future MDEQ approval is contingent upon the assumption that the additional anticipated phases of work will be carried out based on the results of this phase (Phase I) of the investigation and that MDEQ concurrence and approval will be sought for the additional phases of work. As a result, the MDEQ cannot approve of the schedule beyond the Phase I activities. Please ensure that the Work Plan accurately reflects this understanding.

The MDEQ considers the YTI property to the north to be part of the overall former Detroit Coke Facility and to be part of the area needing investigation under the RI/FS Work Plan and to be part of the area covered by the AOC between the MDEQ and Honeywell International, Incorporated (Honeywell). As a result, the MDEQ expects that the RI/FS Work Plan will address this portion of the facility.

The proposed RI investigation does not include investigative activities to address the potential off-site contaminants at the site, particularly to the north under East Jefferson Avenue. Delineation of the extent of off-site contamination will be needed in order to complete a RAP. These tasks can be completed as part of a later phase of work as long as this task is proposed as a later phase in the Work Plan.

The proposed RI investigation does not include investigative activities designed to determine the vertical distribution of contaminants along the Detroit River in the area where the deltaic or river sands extend to depth. Please add vertical groundwater

profiling to the Work Plan such that the optimum screen depth can be selected in this area.

Data are lacking in the northwestern corner of the property. Considering the known source areas to the east and the potential for groundwater to flow in a more westerly direction in this area, the MDEQ requests that a groundwater well be installed to the north and west of proposed well MW-504.

The RI/FS Work Plan needs to include tasks sufficient to determine where free product may remain on the property and sufficient to allow for monitoring of that product as part of a RAP.

The Work Plan needs to be modified to characterize mercury in groundwater at the site. Please include tasks to determine whether mercury is present in groundwater at regulated levels in the areas where it was previously detected above the detection limit.

The Work Plan proposes to use a 2% conversion factor for determining the unionized portion of ammonia based upon the total ammonia. The proposed 2% conversion is based upon median pH and temperature data. Footnote (CC) of R 299.5750 of the NREPA and the Part 201 Administrative Rules requires that a conversion factor of 3.8% be used for coldwater surface water in cases where a stream or river based number cannot or has not been determined. The MDEQ requests that this conversion factor be used until it can be demonstrated that another factor is more appropriate.

The MDEQ considers it necessary to assess whether sediments in the adjacent river have been contaminated by the known facility. Please include tasks to complete this assessment. These sediments, if contaminated from the known facility, would then be part of the facility and would need to be addressed as part of a RAP for the site.

The Work Plan needs to include a task to determine whether or not measures need to be taken to protect against exposure to ammonia via the inhalation pathway. The present MDEQ models may not accurately represent this pathway for conditions at the site. Please include tasks to address this issue in the RI/FS Work Plan.

### **Overall Issues**

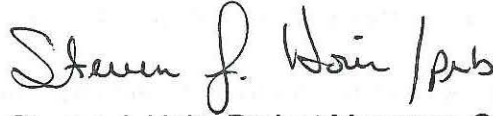
The MDEQ requests that the procedures used in the Monitoring Plan and the RI/FS Work Plan follow the MDEQ's recent Operational Memoranda as closely as possible. In the event that procedures are used that do not follow the Memoranda, please provide the MDEQ with a notification as soon as the difference is noted.

Although the MDEQ is requesting that the RI/FS Work Plan be modified to address the concerns and comments outlined in this letter, the MDEQ considers the proposed investigative tasks to be a necessary part of the RI/FS Investigation and recommends

that Honeywell proceed quickly to implement those activities. The MDEQ requests that Honeywell submit a revised RI/FS Work Plan within 90 days of receipt of this letter.

If you have any questions regarding this matter, please contact me.

Sincerely,

Handwritten signature of Steven J. Hoin in cursive script, followed by the initials "pub".

Steven J. Hoin, Project Manager, Geologist  
Detroit District Office  
Remediation and Redevelopment Division  
313-456-4668

cc: Ms. Dana Reznik, USEPA  
Mr. Gregory Rudloff, USEPA  
Mr. Michael O'Hearn, MACTEC  
Mr. Alan Wasserman, Counsel, City of Detroit  
Mr. Raymond Scott, City of Detroit  
Ms. Sharon Newlon, Counsel, Minergy  
Mr. Oladipo Oyinsan, MDEQ  
Ms. Caroline Olmsted, MDEQ  
Mr. Pete Quackenbush, MDEQ



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STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
DETROIT



STEVEN E. CHESTER  
DIRECTOR

July 19, 2005

Mr. Chuck Geadelmann  
Honeywell International, Incorporated  
1985 Douglas Drive North  
MS 2499  
Golden Valley, Minnesota 55422

Dear Mr. Geadelmann:

SUBJECT: Notice of Approval of the Interim Response Plan  
Honeywell/Former Detroit Coke Corporation Property  
Detroit, Wayne County, Michigan

The Michigan Department of Environmental Quality (MDEQ), Remediation and Redevelopment Division (RRD), has reviewed the Interim Response Plan (IRP) for the above-referenced site. The IRP is titled the "Final Revised Interim Response Plan, Former Detroit Coke Corporation Site, Detroit, Michigan". The IRP dated February 18, 2005, was submitted by Mactec Engineering and Consulting, Inc. on behalf of Honeywell International, Inc. (Honeywell) on February 18, 2005. The former Detroit Coke site was the historical location of a coking operation. Contaminants include VOCs, SVOCs, and ammonia. The IRP is designed to address contaminants that exceed applicable acute criteria and are venting to the Detroit and Rouge Rivers. The IRP involves the installation of groundwater capture/cutoff trenches to address the contaminated groundwater and monitoring of the site hydrogeology to assess the system effect.

The IRP is intended replace portions of the Interim Response Plan for Redevelopment of the former Detroit Coke Corporation Property, dated June 30, 1999, which is Attachment C of the Administrative Order by Consent for Response Activities (Reference No. AOC-ERD-99-05) (AOC). The IRP is approved for both inclusion in the AOC and pursuant to R 299. 5526(5) of Part 201, Environmental Remediation, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). Please make the following changes prior to inclusion in the AOC:

While the MDEQ approves of the technical elements of the IRP, the plan needs to be re-formatted so that the content of the IRP is not a stand-alone document, but rather replaces or amends the sections of the approved IRP that have been changed or are no longer relevant. The MDEQ believes this format would clarify the specific change from a slurry wall to targeted groundwater trenches, and avoid modification of the AOC to accommodate this revision. The revised IRP must encompass all of the administrative and technical components covered by the original IRP and must include appropriate performance standards as included in the original IRP. The IRP may not fully address the Groundwater Surface Water Interface Criteria (GSI) pathway. The IRP needs to specify that this pathway will be addressed, if necessary, as part of the Remedial Action Plan (RAP).



Note that this approval does not alter or change any of the other requirements outlined in the AOC such as free flowing tar removal and installation of a demarcation layer.

The title of the document needs to be modified. An appropriate title would be "Revised Interim Response Plan for the Redevelopment of the Former Detroit Coke Corporation Property, Detroit, Michigan".

Several of the planned monitoring well locations have been moved as a result of site development activities. The IRP needs to accurately reflect these new locations and should be corrected.


The IRP proposes three design alternatives. Considering that an alternative has been selected and installed at the time of this letter, the IRP needs to accurately reflect the selected alternative.

The Monitoring Plan objectives need to be clarified. The IRP includes the objective "to demonstrate containment of groundwater in excess of the GSI criteria". The MDEQ agrees that this will be a major objective of a RAP and can be achieved once the RI/FS Work Plan activities are completed. The objective in the IRP should be to: "assess and measure the effect of the interim system on groundwater flow."

The RRD expresses no opinion as to other contaminants beyond those identified for the specified media and/or portion of the site addressed and remediated as part of the approved IRP. This document does not convey or imply any other position of the RRD regarding known or potential environmental conditions and compliance with environmental protection laws and regulations. In providing this document, the RRD makes no warranty or guarantee as to the fitness of this site for any general or specific use and prospective purchasers or users are advised to use due diligence prior to acquiring or using this site. Details about response activities at this location may be found on file at the Detroit District Office.

The MDEQ requests that Honeywell submit a revised IRP for insertion into the AOC within 90 days of receipt of this letter. If you should have further questions or concerns, please contact Mr. Steve Hoin, DEQ Detroit District Office, at 313-456-4668.

Sincerely,

  
Oladipo Oyinsan, District Supervisor  
Southeast Michigan District Office  
Remediation and Redevelopment Division  
586-753-3800

cc: Ms. Dana Rzeznik, USEPA  
Ms. Sharon Newlon, Dickinson Wright PLLC  
Mr. Gregory Rudloff, USEPA  
Mr. Michael O'Hearn, MACTEC  
Mr. Alan Wasserman, Counsel, City of Detroit  
Mr. Raymond Scott, City of Detroit  
Ms. Caroline Olmsted, MDEQ  
Mr. Pete Quackenbush, MDEQ  
Mr. Steven Hoin, MDEQ



JENNIFER M. GRANHOLM  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
DETROIT



STEVEN E. CHESTER  
DIRECTOR

January 11, 2005

Mr. Garret E. Bondy  
MACTEC Engineering and Consulting Inc.  
46850 Magellan Drive, Suite 190  
Novi, Michigan 48377

Dear Mr. Bondy:

SUBJECT: Monitoring Plan for the Revised Interim Response Plan (IRP) for the Honeywell/  
Former Detroit Coke Corporation Property, Detroit, Michigan

The MDEQ has reviewed the Monitoring Plan, received by this office on November 04, 2004.  
We have the following comments.

Monitoring Objectives

The preliminary Monitoring Plan objectives are broader than can be accomplished under the IRP. Although the primary objective of the IRP is to prevent groundwater above GSI from entering the Rivers; it is the DEQ's understanding that some additional remedial measures will likely be needed to accomplish this objective. The need for additional measures will be determined following planned RI/FS activities. Therefore the objectives of the IRP monitoring plan needs to be simplified. For example the objectives of the monitoring should be to:

- to determine whether or not the IRP is working as anticipated, i.e., to collect shallow groundwater upgradient of the trenches, and
- to provide data to estimate the mass removal of contaminants.

Further objectives such as characterization of seepage across the seawall; characterizing the contamination levels and attenuation at points of discharge into the Rivers (the GSI); and providing data to allow for closure, etc. should be part of the planned RI/FS activities.

Proposed Monitoring Locations

The proposed locations include monitoring wells that can be directly related to the IRP; wells that would be more appropriate as part of the RI/FS; and wells to replace existing wells. For this approval the DEQ is providing comment on wells and well locations related to the IRP. Many of the other wells proposed in the monitoring plan

will be needed to complete the RI/FS and Honeywell can install those wells at any time or can include those as part of the RI/FS Work Plan. With regard to the replacement wells, the DEQ does not support the decommissioning of wells unless they clearly interfere with site operations or need to be removed as a result of site construction activities. The DEQ requests that wells

be retained until the RI/FS is completed and a final remedy is installed. Replacement wells that apply to the RI can be included as part of the RI/FS Work Plan.

The DEQ approves of the following wells to be utilized to monitor the IRP activities:

- Wells T1B through T5B
- Wells MW-101, 106, 109R, 110P, 118, 119D, 3P, P5DR, P5SR, 403, 407, 408S, 408D, 409

In addition the DEQ recommends that wells be installed:

- at the end of Trench 2 near MW-3P (a well cluster)
- at both ends of Trenches 3 & 4 (well clusters)
- upgradient of the proposed extraction well near SB-1D,
- near the River in the vicinity of SB-4D
- at or near SB-23D

The DEQ also requests that wells MW-1, MW-100, MW-104, and MW-306 be monitored as part of the monitoring program.

Additional wells may be needed in the event that the IRP is modified other than proposed in the December 22, 2004 letter.

The DEQ approves of the proposed water quality sampling program with the following modifications. Parameters must be listed by methods approved by the DEQ in Operational Memorandum No. 2 and must include mercury, manganese, sodium, chloride, alkalinity, pH and conductivity in addition to the proposed parameter list. That approval is also based upon the assumption that wells added as a result of this letter will be monitored following the protocol outlined in Table E-1 of the IRP.

The DEQ also requests that all wells designated as piezometers be constructed such that they can function as monitoring wells for water quality sampling.

The locations of the stream gauges is approved; however the DEQ requests that the gauges be constructed as stilling wells and be sufficient to withstand the expected winter conditions. The wells should also be designed such that automatic water level measuring recorders can be easily installed. These automatic water level recorders should be installed as part of the IRP and operated at a ½ hour, or less, recording frequency. Automatic water level monitoring is also expected for the trench wells. Honeywell should also expect to perform automatic water level monitoring at critical GSI wells.

The preceding comments do not mean that the DEQ does not support the other planned wells. Those wells can be used as part of the subsequent RI/FS and should be installed at this time.

#### System Performance Monitoring

The DEQ approves of the proposed system performance monitoring program.

January 11, 2005

Because this is an IRP, system shutdown can only occur once the systems are incorporated into a RAP and the performance objectives are clearly defined. This section is not appropriate for the IRP monitoring plan.

Other Issues

The monitoring plan must follow protocol outlined in the recent DEQ Operational Memoranda unless otherwise approved.

The DEQ agrees with the December 22, 2004 comments with the exception of the last comment. The DEQ requests that Honeywell submit an RI/FS Work Plan within 60 days of receipt of this letter. The DEQ considers this critical in meeting the requirements of the Administrative Order by Consent for Response Activity (AOC-ERD-99-005) between Honeywell and the DEQ. A new revised IRP should be submitted that incorporates all of the previous comments on the IRP and monitoring plan, within 30 days of receipt of this letter.

If you have any questions regarding this matter, please contact Mr. Steve Hoin at 734-432-1296.

Sincerely,



Edward A. Novak  
Senior Environmental Quality Analyst  
Remediation and Redevelopment Division  
313-456-4668

cc: Ms. Dana Rzeznek, USEPA  
Mr. Gregory Rudloff, USEPA  
Mr. Chuck Gaedermann, Honeywell  
Mr. Alan Wasserman  
Mr. Grant Trigger  
Mr. Raymond Scott  
Ms. Sharon Newlon  
Mr. Oladipo Oyinsan, DEQ  
Mr. Steve Hoin, DEQ  
Ms. Caroline Olmsted, DEQ  
Mr. Pete Quackenbush, DEQ



JENNIFER M. GRANHOLM  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
DETROIT



STEVEN E. CHESTER  
DIRECTOR

January 18, 2005

Mr. Chuck Geadelmann, P.E.  
Corporate Manager, Remediation & Evaluation Services  
Honeywell  
7171 Ohms Lane  
Edina, MN 55439

Dear Mr. Bondy:

SUBJECT: Progress Report No. 61, Interim Response Plan for the Former Detroit  
Coke Corporation Property, Detroit, Michigan

The MDEQ has reviewed the Progress Report No. 61, received on December 22, 2004  
and has been entered into the administrative record.

If you have any questions regarding this matter, please contact me.

Sincerely,

Edward A. Novak  
Senior Environmental Quality Analyst  
Remediation and Redevelopment Division  
313-456-4668

cc: Ms. Dana Rzeznik, USEPA  
Mr. Gregory Rudloff, USEPA  
Mr. Alan Wasserman, Williams, Acosta  
Mr. Raymond Scott, City of Detroit  
Ms. Sharon Newlon, Dickinson Wright  
Mr. Grant Trigger, Honigman and Miller  
Mr. Garret E. Bondy, MACTEC  
Mr. Oladipo Oyinsan, DEQ  
Mr. Steve Hoin, DEQ  
Ms. Caroline Olmsted, DEQ  
Mr. Peter Quackenbush, DEQ





JENNIFER M. GRANHOLM  
GOVERNOR

STATE OF MICHIGAN  
DEPARTMENT OF ENVIRONMENTAL QUALITY  
DETROIT



STEVEN E. CHESTER  
DIRECTOR

February 7, 2005

Mr. Chuck Geadelmann, P.E.  
Corporate Manager, Remediation & Evaluation Services  
Honeywell  
7171 Ohms Lane  
Edina, MN 55439

Dear Mr. Bondy:

SUBJECT: Progress Report No. 62, Interim Response Plan for the Former Detroit  
Coke Corporation Property, Detroit, Michigan

The MDEQ has reviewed the Progress Report No. 62, received on January 25, 2004 and has been entered into the administrative record.

If you have any questions regarding this matter, please contact me.

Sincerely,

Edward A. Novak  
Senior Environmental Quality Analyst  
Remediation and Redevelopment Division  
313-456-4668

cc: Ms. Dana Rzeznik, USEPA  
Mr. Gregory Rudloff, USEPA  
Mr. Alan Wasserman, Williams, Acosta  
Mr. Raymond Scott, City of Detroit  
Ms. Sharon Newlon, Dickinson Wright  
Mr. Grant Trigger, Honigman and Miller  
Mr. Garret E. Bondy, MACTEC  
Mr. Oladipo Oyinsan, DEQ  
Mr. Steve Hoin, DEQ  
Ms. Caroline Olmsted, DEQ  
Mr. Peter Quackenbush, DEQ